BookletChart^m

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Intracoastal Waterway – Galveston Bay to Cedar Lakes

NOAA Chart 11322

A reduced-scale NOAA nautical chart for small boaters When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker

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Published by the National Oceanic and Atmospheric Administration National Ocean Service Office of Coast Survey

<u>www.NauticalCharts.NOAA.gov</u> 888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart[™]?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

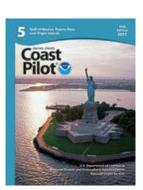
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=113http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=113http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=113http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=113http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=113http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=113http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=113<a href="http://www.nauticalcharts.noaa.gov/nsd/searchbycharts.noaa.gov/ns



[Coast Pilot 5, Chapter 12 excerpts]

The waterway leaves the Bolivar cut and enters **Galveston Bay** at **Mile 349.3W**. The direct route bypasses Galveston and proceeds SW through the lower part of the bay. **Houston Ship Channel** is crossed at **Mile 350.2W**. The Coast Guard has requested vessels transiting the waterway make a **SECURITE** call on VHF-FM channel 13 prior to crossing Houston Ship Channel, particularly during periods of restricted visibility. Vessel Traffic Service Houston-

Galveston recommends west bound tows avoid meeting east bound tows between Bolivar Peninsula Buoy 15 and Buoy 20 due to strong currents and shoaling at the entrance to Bolivar. The port of **Houston** is

43 miles to the NW. The channel to Texas City is crossed at **Mile 350.8W**; the port is 5 miles to the WNW.

Vessel Traffic Service Houston–Galveston became mandatory 13 October 1994. VTS Houston/Galveston is an information hub, using radar, closed circuit television, and VHF communications to provide the users with decision making information. VTS Houston/Galveston's mission is to facilitate safe, efficient waterborne commerce. Specifically, VTS Houston/Galveston works to prevent groundings, rammings, and collisions, by sharing information and implementing appropriate traffic management measures.

Detailed information on VTS Houston/Galveston's operating requirements, designated frequencies, precautionary areas, and mandatory reporting points can be found in CFR Chapter 2 Part 161 Vessel Traffic Management, tables 161.12, 161.35(b), and 161.35(c). Mariners should obtain the latest edition of the U.S. Coast Guard's Houston/Galveston Vessel Traffic Service User's Manual, available from the Commanding Officer, U.S. Coast Guard Vessel Traffic Houston/Galveston, 9640 Clinton Drive, Houston, TX 77029. Website: www.uscg.mil/VTSHouston

Anchorages.—Vessels may anchor off the bar in the Galveston Entrance Anchorages just inshore of the intersection of the Galveston Safety Fairway with the Coastwise Fairway. (See 166.100 through 166.200, chapter 2, for limits and regulations.)

Small craft anchoring in the designated areas should find the shoaler water so as to leave the deeper areas clear for larger vessels.

Dangers.—A considerable number of unmarked dangerous wrecks exist in the approaches to Galveston Bay Entrance. A spoil bank is S of the Outer Bar Channel, and an extensive shoal area is S of the channel between the jetties. Heald Bank and the offshore oil well structures are the principal hazards.

Vessels navigating in the Houston Ship Channel from Bolivar Roads to Morgans Point are cautioned about the heavy breakers which result from the bow wakes of tankers and other large merchant vessels in the channel.

Dangers.—About 6 miles SW of the entrance to Freeport Harbor, Brazos River has generated a shoal extending about 5 miles into the Gulf off the mouth of the river. This area is foul and should be given a wide berth. It is reported that several vessels have stranded in this vicinity and that the depths are considerably less than charted. The bottom is soft mud, indicating that silting from the river has occurred.

Oil drilling structures may be erected in the Gulf near the approach to Freeport Harbor. Mariners should be on the lookout for these structures and give them a wide berth.

Strong cross winds and currents at the jetty entrance make navigation difficult for larger vessels. Difficulty in navigation is experienced with larger vessels at the junction with the Intracoastal Waterway when strong currents are flowing from the canal. Large vessels are difficult to turn in the smaller upper turning basin.

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC New Orleans

Commander 8th CG District

New Orleans, LA

(504) 589-6225



NOAA's navigation managers serve as ambassadors to the maritime community.

They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit nauticalcharts.noaa.gov/service/navmanagers

To make suggestions or ask questions online, go to *nauticalcharts.noaa.gov/inquiry*. To report a chart discrepancy, please use *ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx*.

Lateral System As Seen Entering From Seaward on navigable waters except Western Rivers



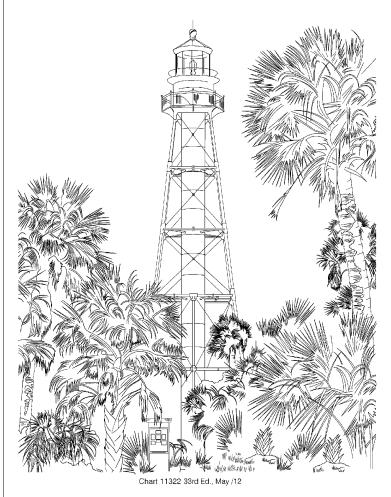


NAUTICAL CHART 11322

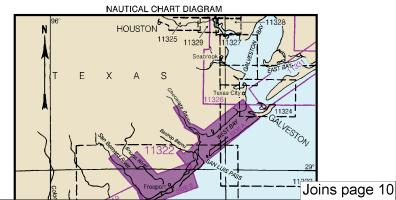
INTRACOASTAL WATERWAY

TEXAS

GALVESTON BAY TO CEDAR LAKES



Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY



MERCATOR PROJECTION AT SCALE 1:40,000 SOUNDINGS IN FEET

AT MEAN LOWER LOW WATER North American Datum of 1983 (World Geodetic System 1984)

Additional information can be obtained at nauticalcharts.noaa.gov.

HEIGHTS

Heights in feet above Mean High Water.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

SUPPLEMENTAL INFORMATION

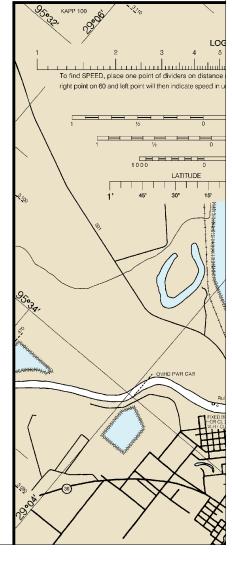
Consult U.S. Coast Pilot 5 for important supplemental information.

PUBLIC BOATING INSTRUCTION PROGRAMS

The United States Power Squadrons (USPS) and U.S. Coast Guard Auxiliary (USCGAUX), national organizations of boatmen, conduct extensive boating instruction programs in communities throughout the United States. For information regarding these educational courses, contact the following sources:

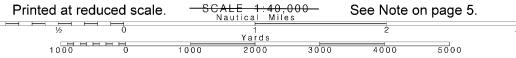
USPS - Local Squadron Commander or USPS Headquarters, 1504 Blue Ridge Road, Raleigh, NC 27607, 888-367-8777

USCGAUX - COMMANDER (OAX), Eighth Coast Guard District, Hale Boggs Federal Building, Suite 1126, 500 Poydras Street, New Orleans, LA 70130, 800-524-8835 or USCG Headquarters, Office of the Chief Director (G-OCX), 2100 Second Street, SW, Washington, DC 20593





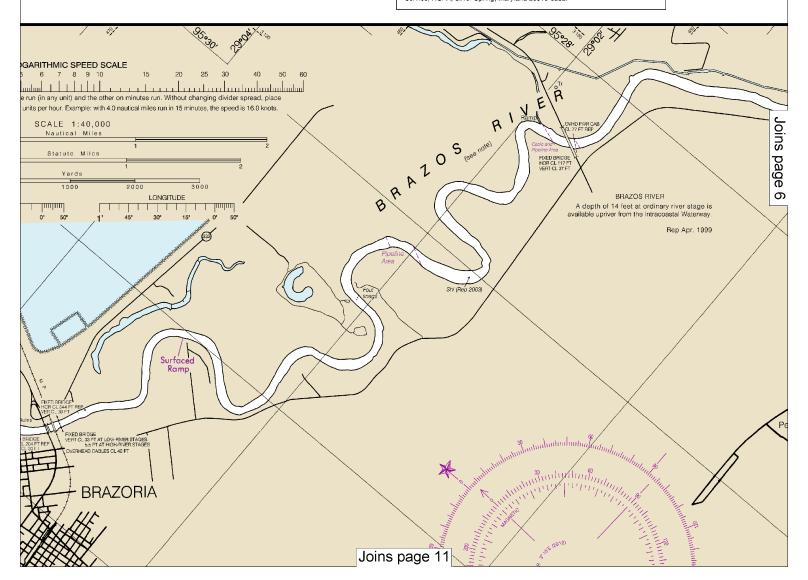
Note: Chart grid lines are aligned with true north.



ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.) Aids to Navigation (lights are white unless otherwise indicated): AERO aeronautical G green R TR radio tower Rot rotating IQ interrupted quick Iso isophase Al alternating N nun OBSC obscured B black s seconds LT HO lighthouse
M nautical mile
m minutes
MICRO TR microwave tower Bn beacon Oc occulting SEC sector C can
DIA diaphone
F fixed
FI flashing Or orange Q quick R red St M statute miles VQ very quick TIDAL INFORMATION Predicted times for low tides may be obtained in Pass Cavallo (28°22' 96°24') Ra Ref radar reflector Mkr marker WHIS whistle by subtracting 1 hour 20 minutes, with time of high tide corresponding to that of reference station. R Bn radiobeacon Bottom characteristics In Matagorda Bay the periodic tide has a mean range less than one-half foot Bids boulders Co coral gy gray h hard M mud Oys oyster Rk rock S sand so soft Sh shells sy sticky G gravel Grs grass CAUTION Miscellaneous: AUTH authorized This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to PD position doubtful Subm submerged Obstn obstruction ED existence doubtful PA position approximate Rep recorted 21. Wreck, rock obstruction, or shoal swept clear to the depth indicated.

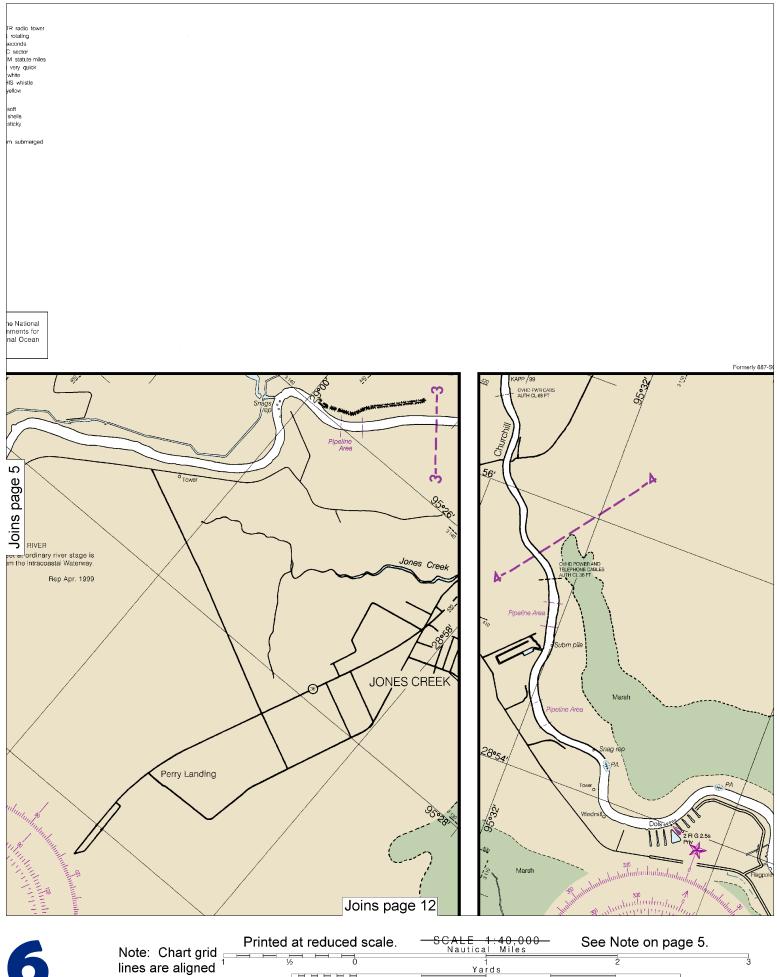
(2) Rocks that covor and uncover, with heights in feet above datum of so COLREGS: International Regulations for Preventing Collisions at Sea, 1972. Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov. Demarcation lines are shown thus: -HORIZONTAL DATUM The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.871" northward and 0.761' westward to agree with this chart.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.



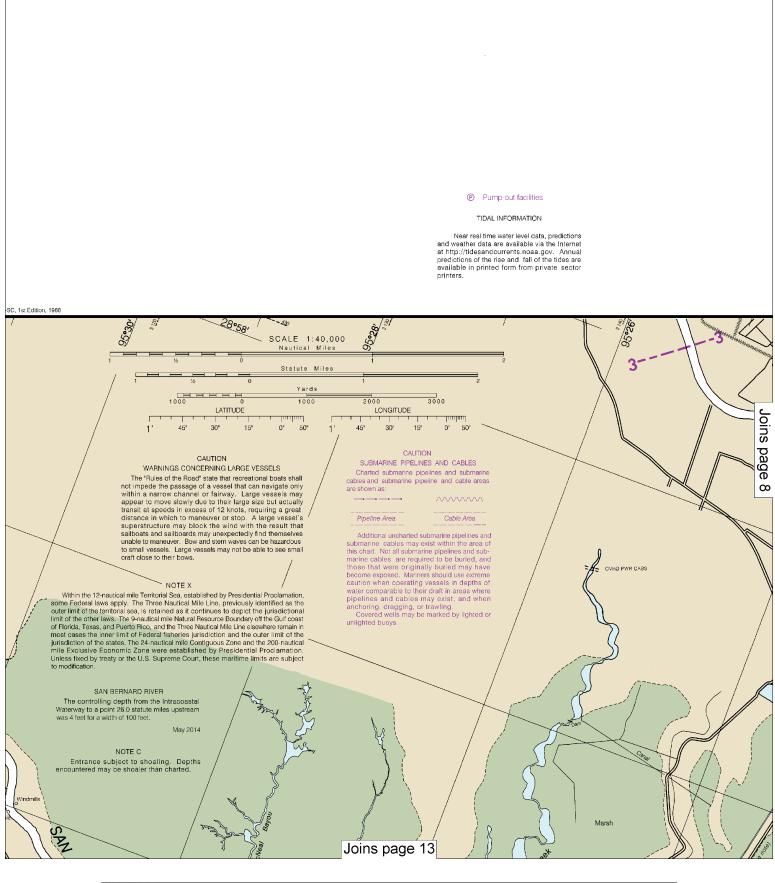
This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:53333. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.







1000 0 with true north.



CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National

Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

(Accurate location) o(Approximate location)

FREEPORT HARBOR CHANNEL DEPTHS TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF FEB-APR 2015 CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOW TIDE (MLT) LENGTH * DEPTH (MILES) MILLW (FEET) WIDTH (FEET) INSIDE QUARTER INSIDE OUTSIDE QUARTER QUARTE NAME OF CHANNEL OUTSIDE QUARTER DATE OF SURVEY OUTER BAR CHANNEL 4.92 1.35 2-15 2-15 44.0 43.0 38.0 JETTY CHANNEL JETTY CHANNEL TO BRAZOSPORT 39.0 TURNING BASIN 43.0 0.13 45 45 BRAZOSPORT TURNING BASIN BRAZOSPORT TURNING BASIN TO 40.0 45.0 44.0 40.0 2-15 370-1000 0.48 44.0 39.0 39.0 UPPER TURNING BASIN 280-1206 1.03 200-650 750 0.53 BRAZOS HARBOR APPROACH CHANNEL BRAZOS HARBOR TURNING BASIN

INFORMATION IN THIS TABULATION HAS BEEN PROVIDED TO NOAA BY THE DEPTHS ARE REFERENCED TO A LOCAL DREDGING REFERENCE CALLED MEA CONVERSION TO MEAN LOWER LOW WATER, ADD 1 FOOT TO EACH DEPTH * PROJECT LENGTHS ARE APPROXIMATE PRODING NEW DATA FROM USACE. J.S. ARMY COR OF ENGINEERS

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

INTRACOASTAL WATERWAY

Project Depths

12 feet Carrabelle, FL to Brownsville, T The controlling depths are published per cally in the U.S. Coast Guard Local Notic Mariners.

Distances

Mileage distances shown along the Water are in Statute Miles, based on zero at Ham Lock, LA, and are indicated thus:

Tables for converting Statute Miles to Inf

national Nautical Miles are given in U.S. Co

INTRACOASTAL WATERWAY AIDS

The U.S. Aids to Navigation System is signed for use with nautical charts, and the exmeaning of an aid to navigation may not be clunless the appropriate chart is consulted.

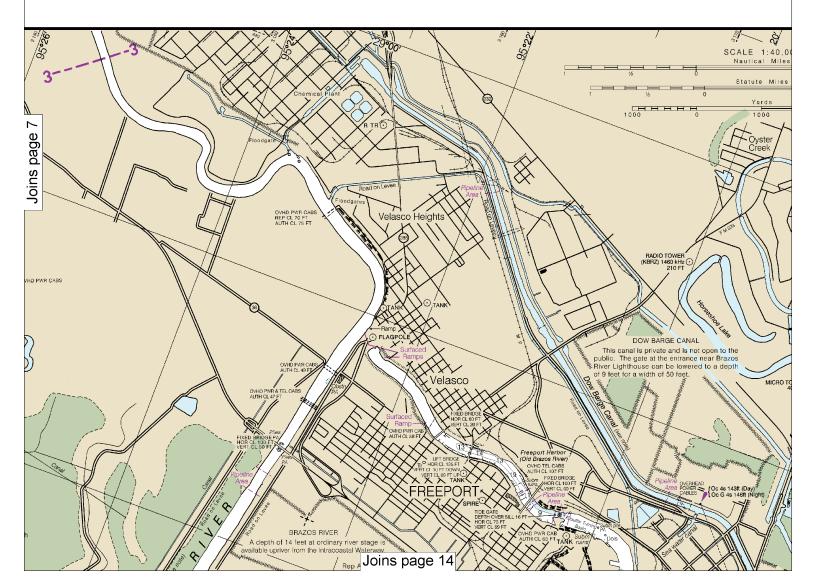
Aids to navigation marking the intracoas
Waterway exhibit unique yellow symbols

distinguish them from aids marking other w

ways.

When following the Intracoastal Waterways Carroballe FI to Brownsville, westward from Carrabelle, FL to Brownsville, aids with yellow triangles should be kept on starboard side of the vessel and aids with yel squares should be kept on the port side of

A horizontal yellow band provides no late information, but simply identifies aids to ne gation as marking the Intracoastal Waterw.





CALE 1:40,000 Nautical Miles Printed at reduced scale. See Note on page 5. Note: Chart grid lines are aligned Yards 1000 0 with true north. 1000 2000 3000 4000 5000

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CAUTION Survey platforms, signs, pipes, piles, and stakes, some submerged, may exist along the maintained channels. Piles and platforms are not charted where they interfere with a light symbol.

NOTE S

NOTE S

Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 5. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 8th Coast Guard District in New Orleans, LA, or at the Office of the District Engineer, Corps of Engineers in Galveston, TX. Refer to charted regulation section numbers.

MINERAL DEVELOPMENT STRUCTURES

Obstruction lights and sound (fog) signals are required for fixed mineral development structures shown on this chart, subject to ap-proval by the District Commander, U.S. Coast Guard (33 CFR 67).

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION

Small craft should stay clear of large com-

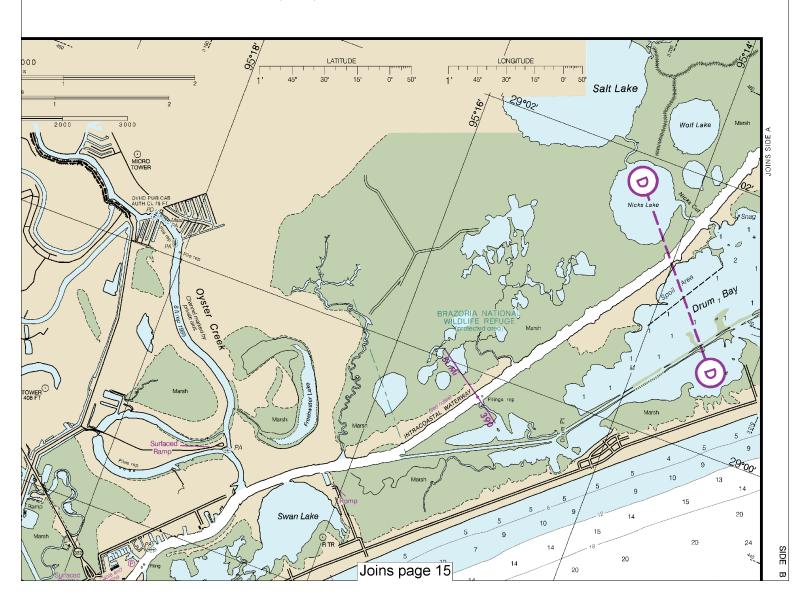
mercial and government vessels even if small craft have the right-of-way.

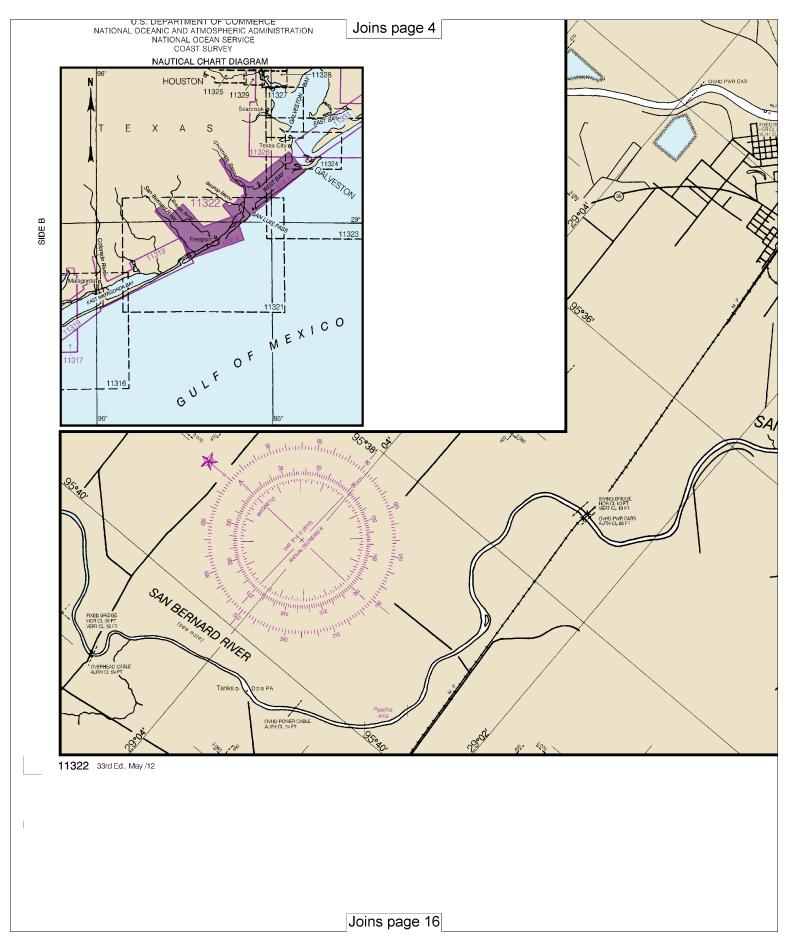
All craft should avoid areas where the skin divers flag, a red square with a diagonal white stripe, is displayed.

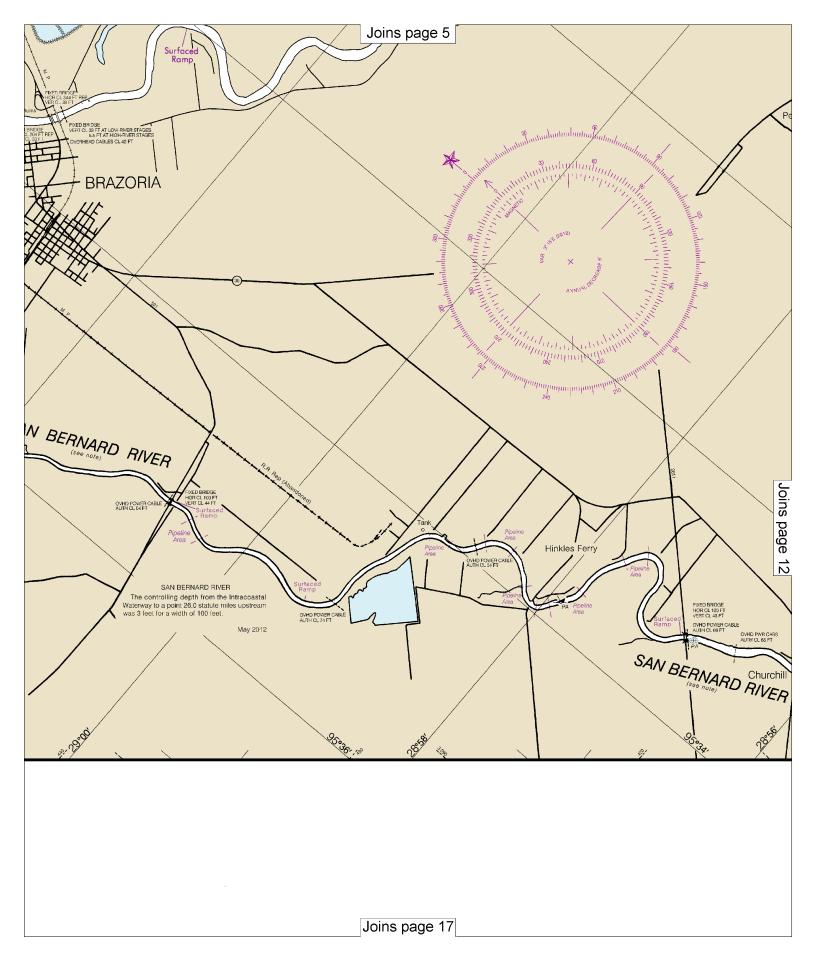
PLANE COORDINATE GRID

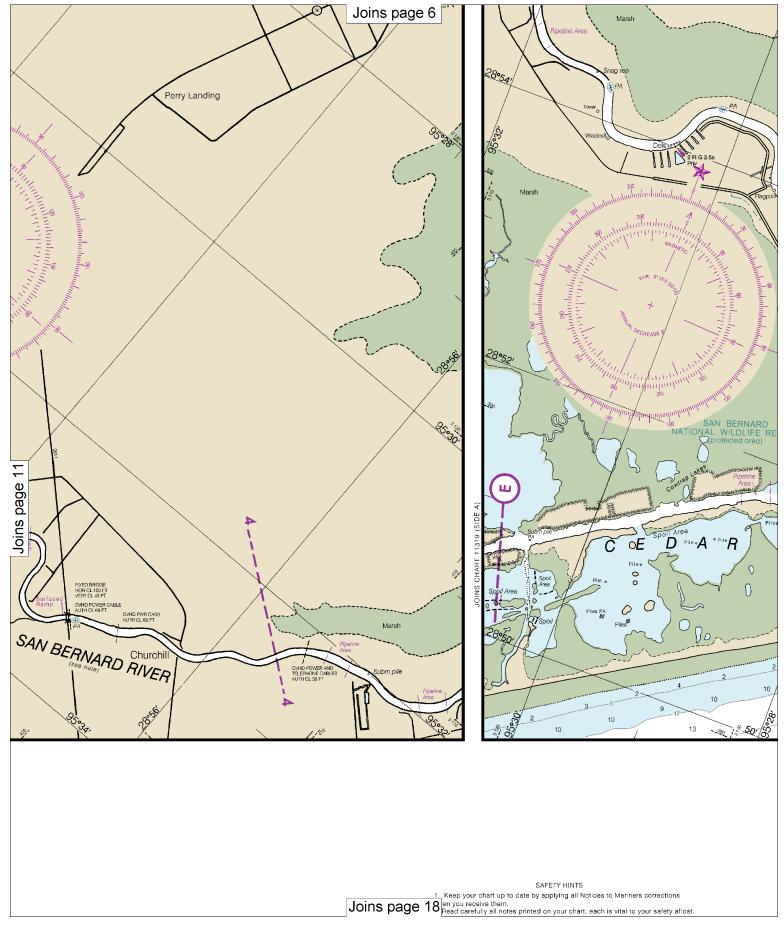
(based on NAD 1927)

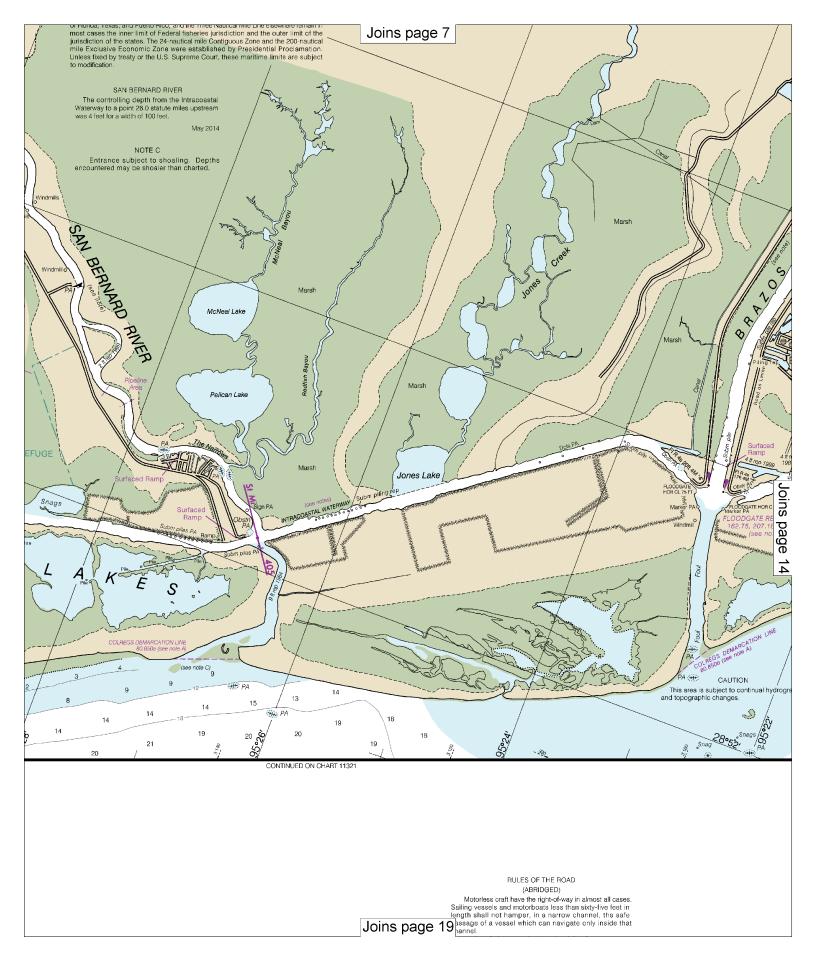
Texas State Grid, south-central zone is indicated by dashed ticks at 10,000 foot intervals. The last three digits are omitted.

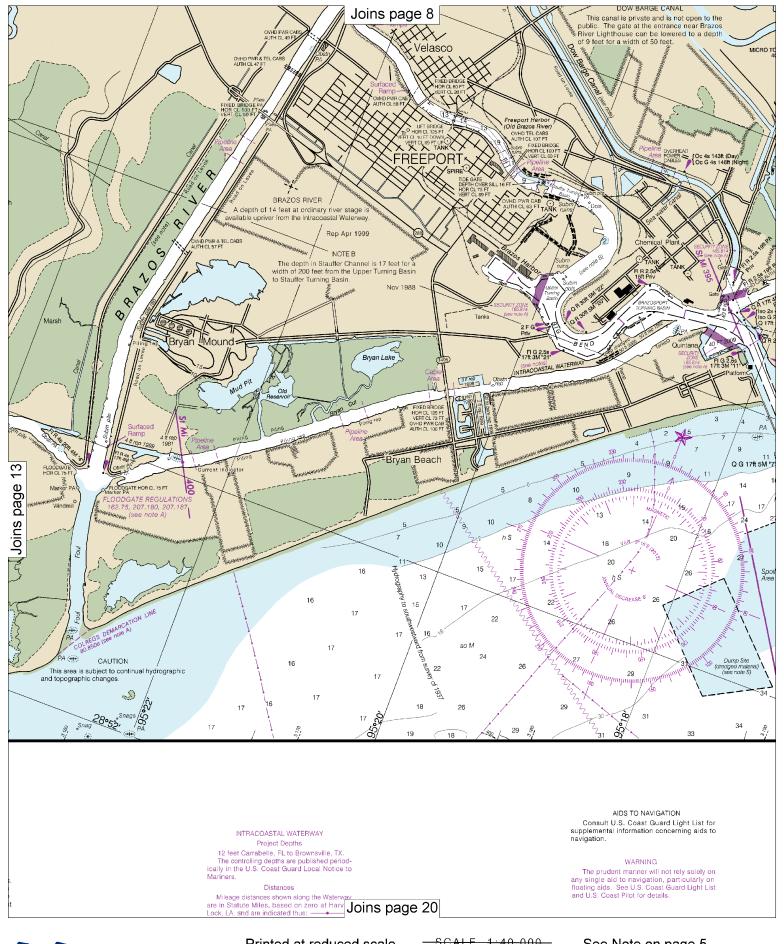


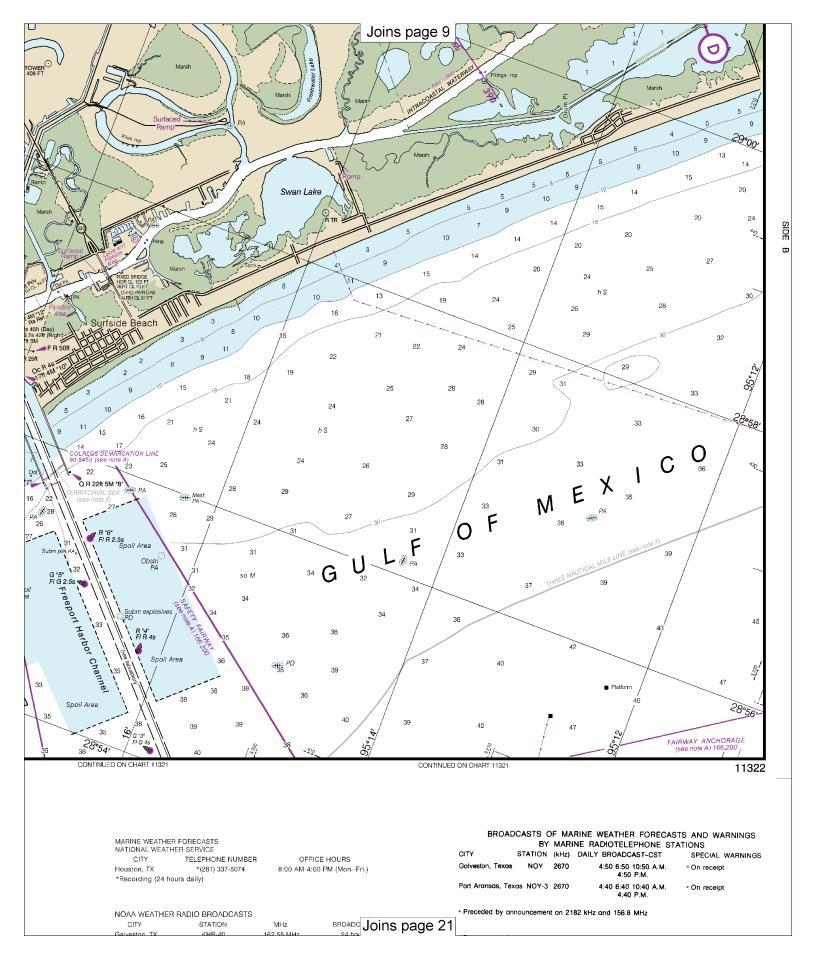




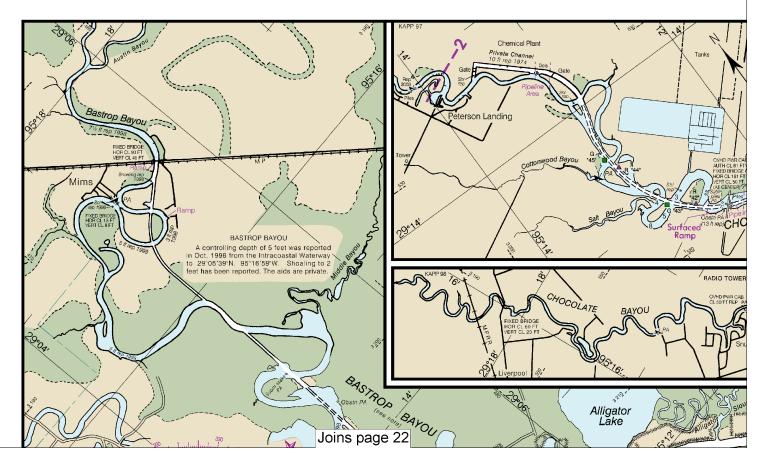




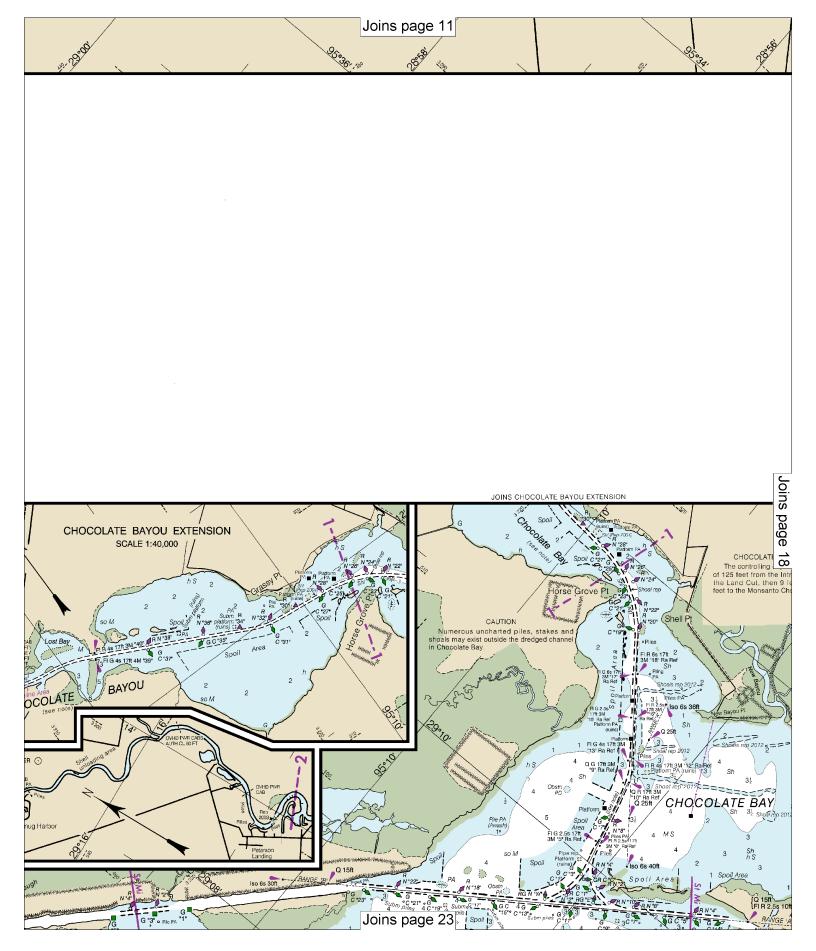


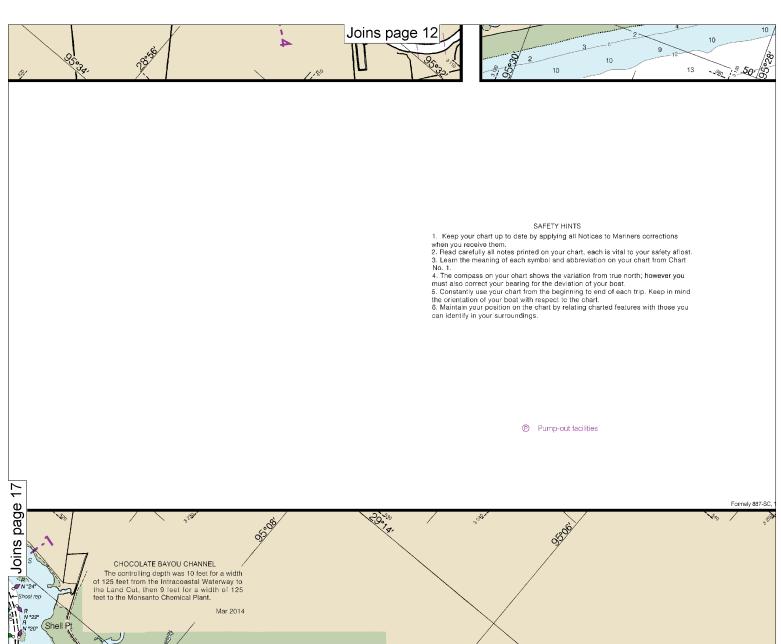


11322 33rd Ed., May /12

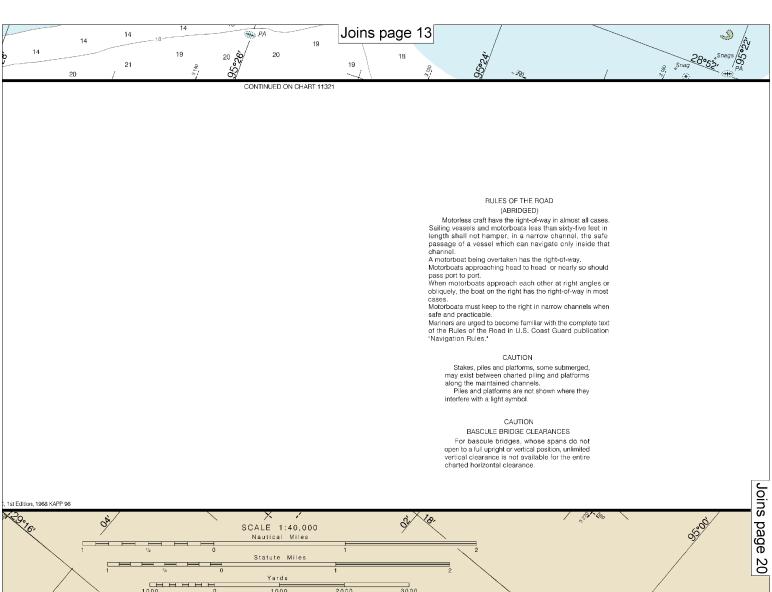


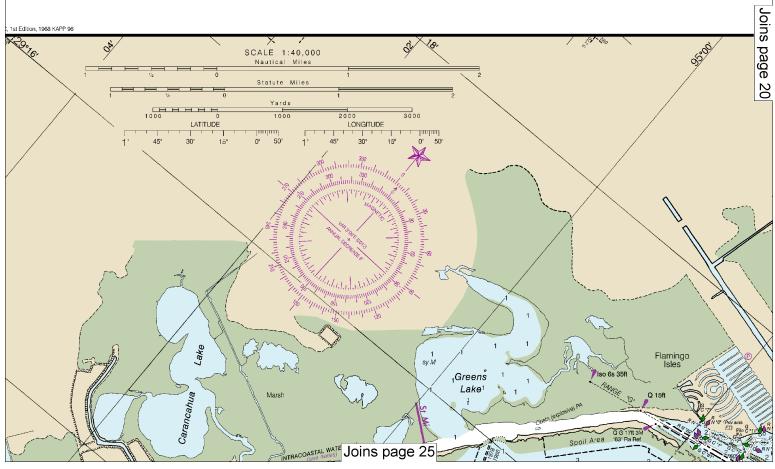
16

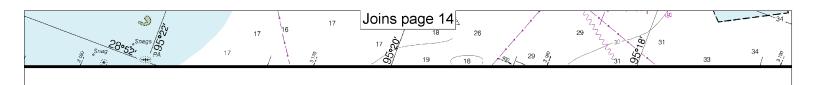












INTRACOASTAL WATERWAY Project Depths

12 feet Carrabelle, FL to Brownsville, TX. The controlling depths are published periodically in the U.S. Coast Guard Local Notice to Mariners.

Distances

Mileage distances shown along the Waterway are in Statute Miles, based on zero at Harvey Lock, LA, and are indicated thus:

Tables for converting Statute Miles to International Nautical Miles are given in U.S. Coast

INTRACOASTAL WATERWAY AIDS

The U.S. Aids to Navigation System is designed for use with nautical charts, and the exact meaning of an aid to navigation may not be clear unless the appropriate chart is consulted.

Aids to navigation marking the Intracoastal Waterway exhibit unique yellow symbols to distinguish them from aids marking other waterways.

When following the Intracoastal Waterway westward from Carrabelle, FL to Brownsville, TX, aids with yellow triangles should be kept on the starboard side of the vessel and aids with yellow squares should be kept on the port side of the

A horizontal yellow band provides no lateral information, but simply identifies aids to navi-gation as marking the Intracoastal Waterway.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

RADAR REFLECTORS

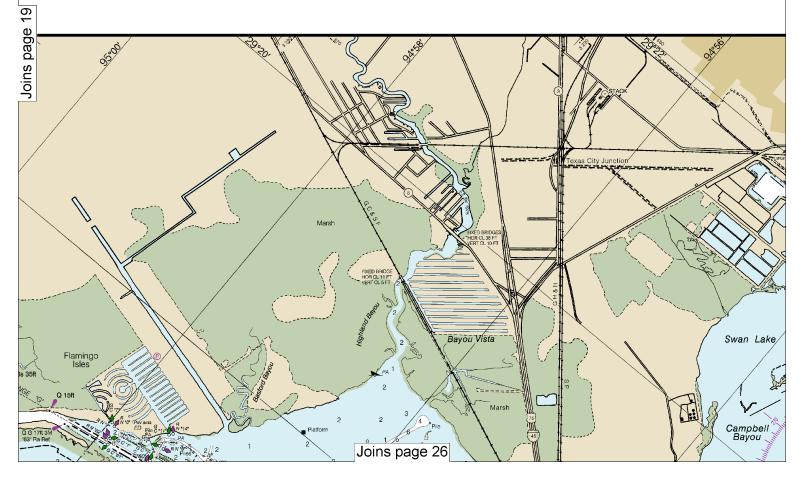
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

PLANE COORDINATE GRID (based on NAD 1927)

Texas State Grid, south-central zone, is in-dicated on this chart at 10,000 foot intervals. The last three digits have been omitted.





Note: Chart grid lines are aligned with true north.



MARINE WEATHER FORECASTS NATIONAL WEATHER SERVICE
CITY TELEPHO

TELEPHONE NUMBER OFFICE HOURS Houston, TX *(281) 337-5074 8:00 AM-4:00 PM (Mon.-Fri.)

*Recording (24 hours daily)

NOAA WEATHER RADIO BROADCASTS

CITY	STATION	MHz	BROADCAST TIMES
Galveston, TX	KHB-40	162.55 MHz	24 hours daily
Bay City, TX	WWG-40	162.425 MHz	24 hours daily
Houston, TX	KGG-68	162.40 MHz	24 hours daily

HURRICANES AND TROPICAL STORMS

Hurricanes, tropical storms and other major storms may cause considerable damage to marine structures, aids to

cause considerable damage to marine structures, aids to navigation and moored vessels, resulting in submerged debris in unknown locations. Charted soundings, channel depths and shoreline may not reflect actual conditions following these storms. Fixed aids to navigation may have been damaged or destroyed. Buoys may have been moved from their charted positions, damaged, sunk, extinguished or otherwise made inoperative. Mariners should not rely upon the position or operation of an aid to navigation. Marche and submarged chetturines met have been feedered. Wrecks and submerged obstructions may have been displaced from charted locations. Pipelines may have become uncovered or moved.

Mariners are urged to exercise extreme caution and are

requested to report aids to navigation discrepancies and hazards to navigation to the nearest United States Coast Guard unit.

BROADCASTS OF MARINE WEATHER FORECASTS AND WARNINGS BY MARINE RADIOTELEPHONE STATIONS

CITY STATION (kHz) DAILY BROADCAST-CST SPECIAL WARNINGS Galveston, Texas NOY 2670 4:50 6:50 10:50 A.M * On receipt

4:50 P.M. Port Aransas, Texas NOY-3 2670 4:40 6:40 10:40 A.M. * On receipt 4:40 P.M.

Distress calls for small craft are made on 2182 kHz or channel 16 (156.80 MHz) VHF.

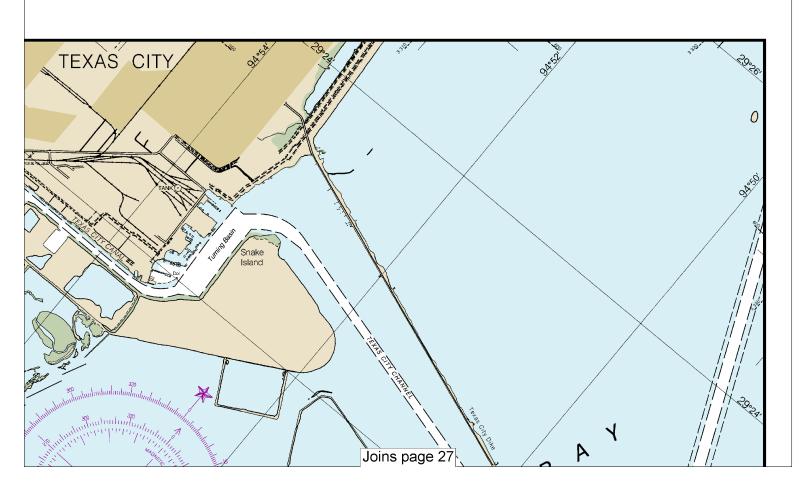
CAUTION

WARNINGS CONCERNING LARGE VESSELS

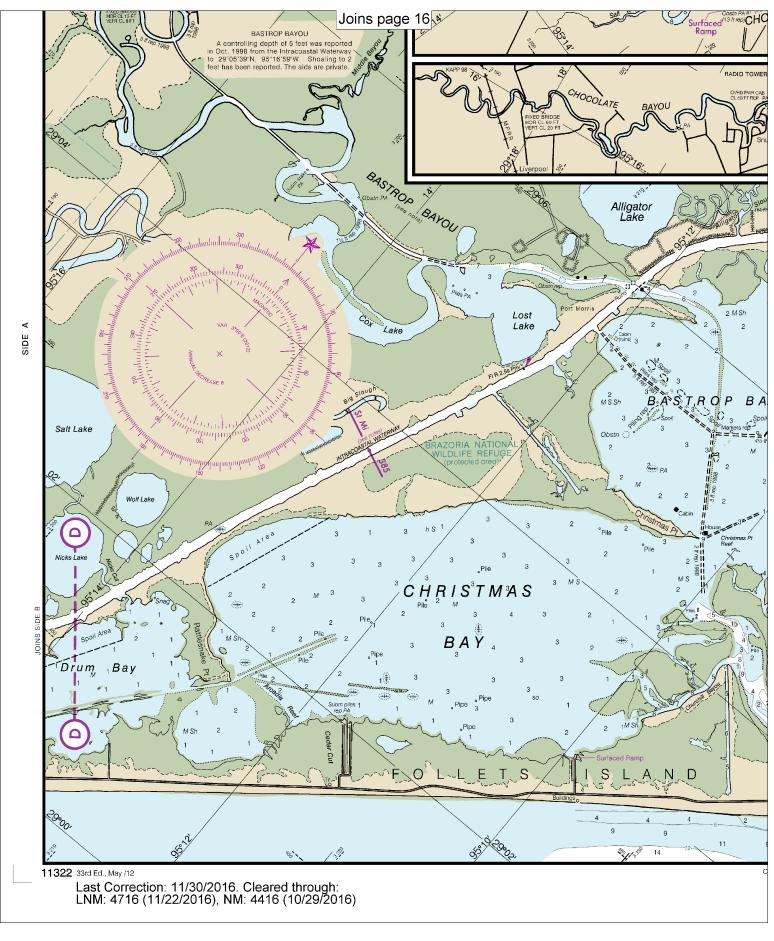
The "Rules of the Road" state that recreational boats shall not impede the passage of a vessel that can navigate only not impede the passage of a vessel that can navigate only within a narrow channel or fairway. Large vessels may appear to move slowly due to their large size but actually transit at speeds in excess of 12 knots, requiring a great distance in which to maneuver or stop. A large vessel's superstructure may block the wind with the result that sailboats and sailboards may unexpectedly find themselves unable to maneuver. Bow and stern waves can be hazardous to small vessels. Large vessels may not be able to see small craft close to their howe. craft close to their bows.

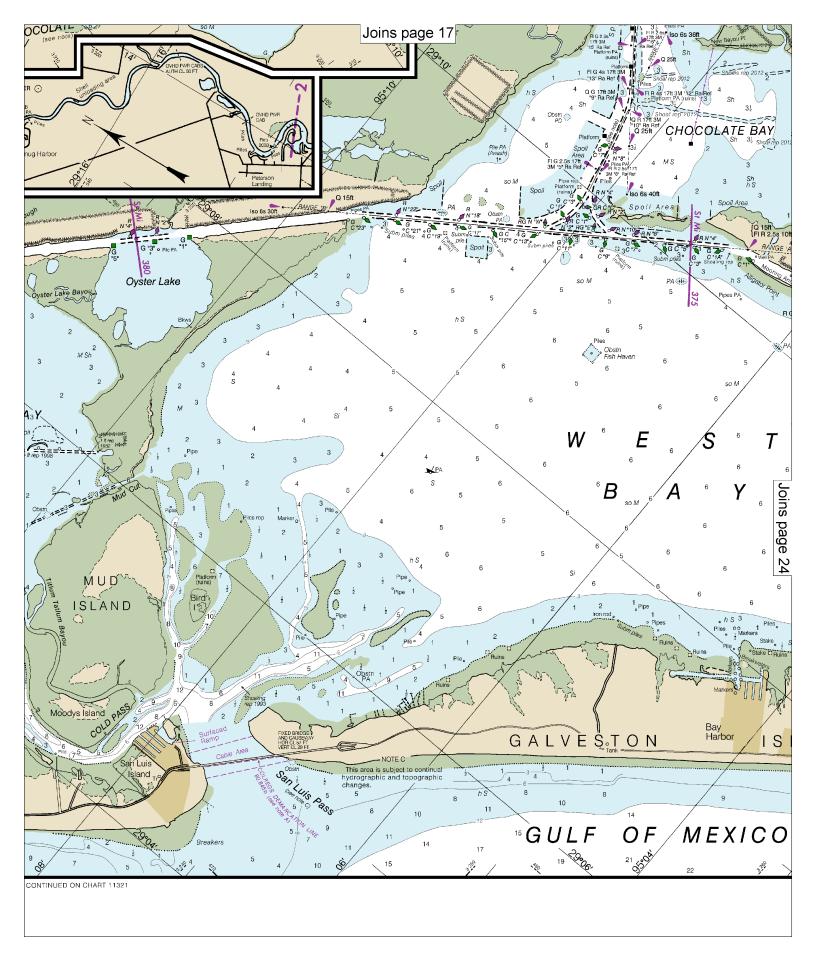
ACKNOWLEDGMENT

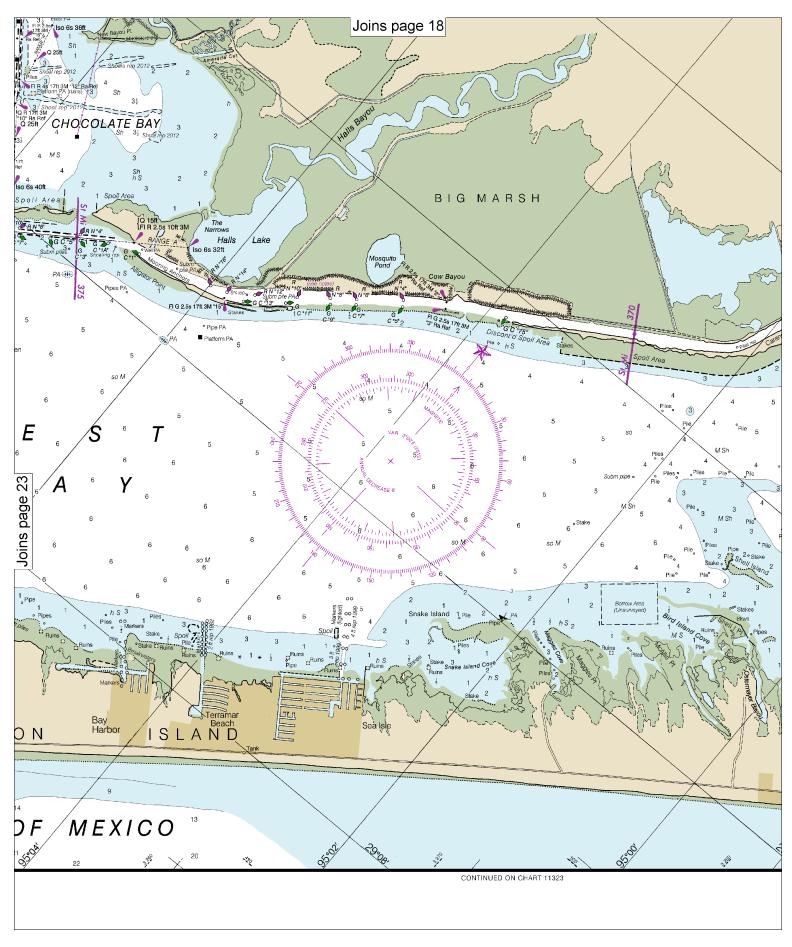
The National Ocean Service acknowledges the exceptional cooperation received from members of the Galveston Bay Power Squadron, District 21, United States Power Squadrons, for continually providing essential information for revising this chart.

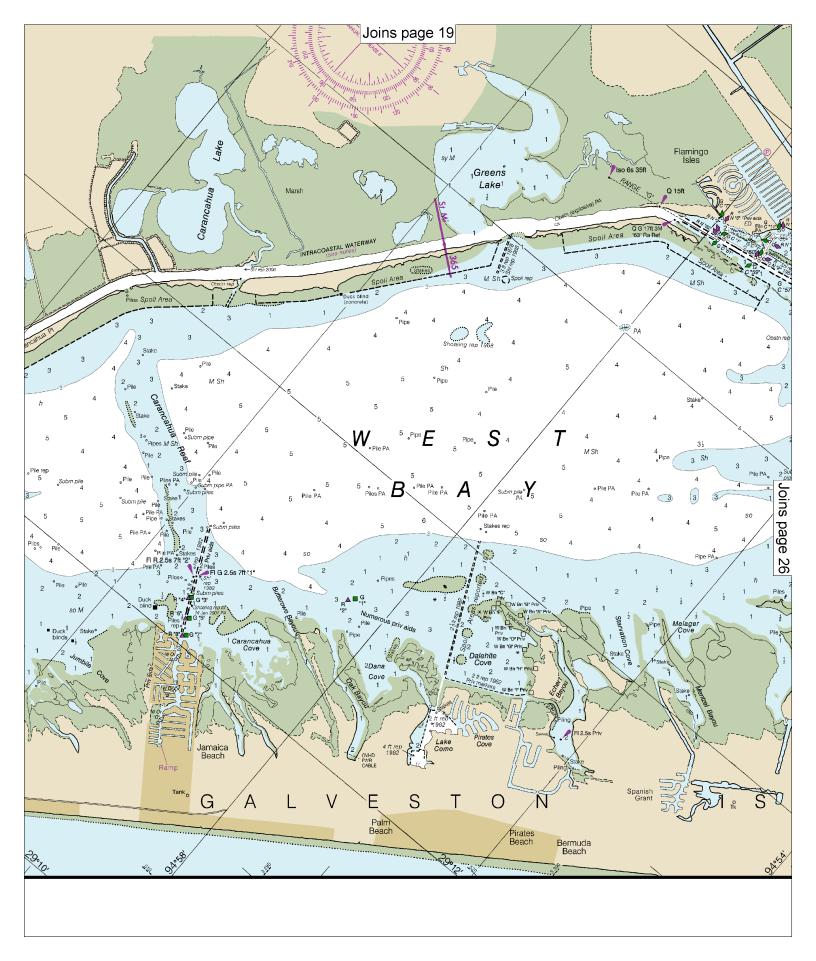


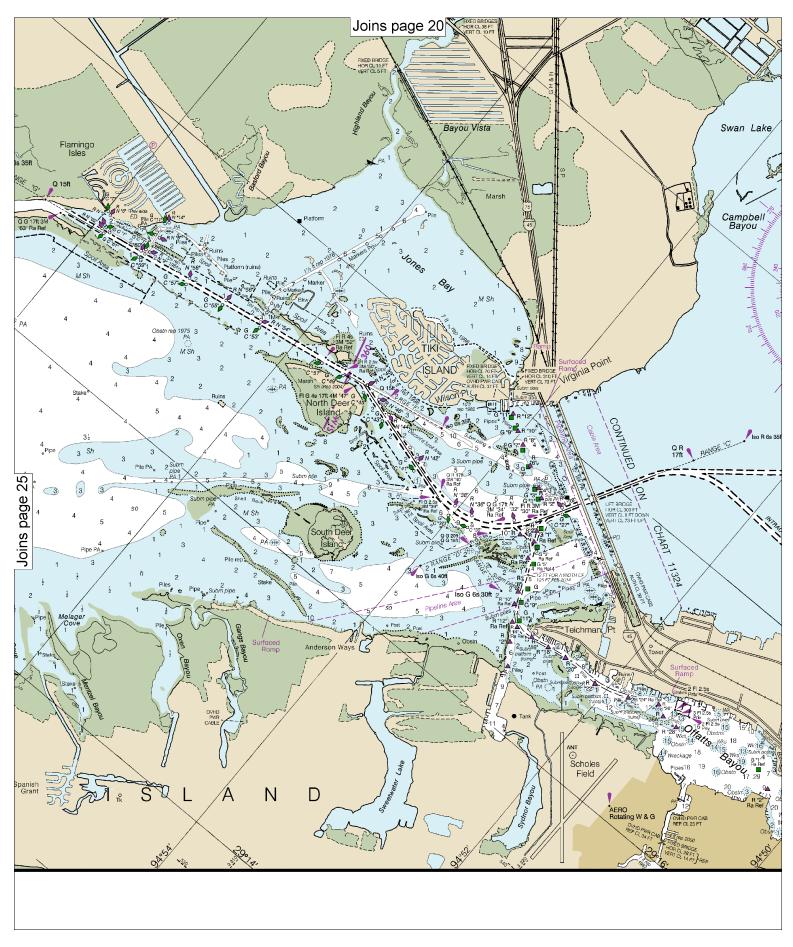
^{*} Preceded by announcement on 2182 kHz and 156.8 MHz

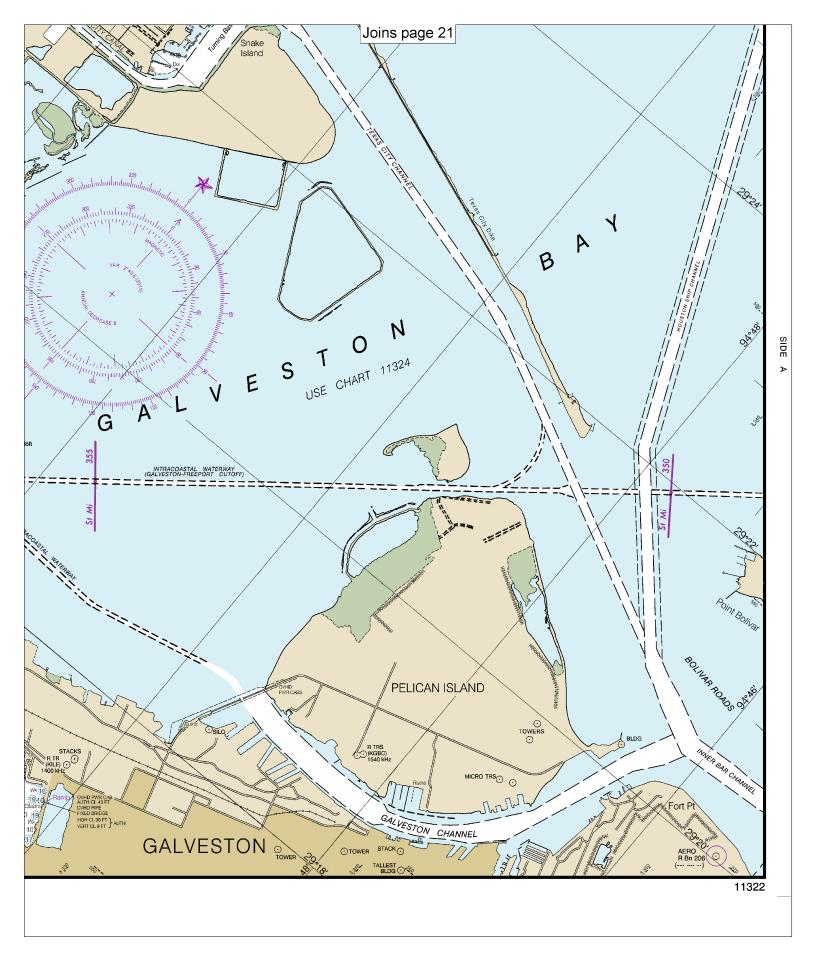














VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here. Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of

Emergency; Number of People on Board.

- · Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

http://www.nws.noaa.gov/nwr/

Quick References

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Interactive chart catalog — http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml

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Coast Pilot online — http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm

Tides and Currents — http://tidesandcurrents.noaa.gov

Marine Forecasts — http://www.nws.noaa.gov/om/marine/home.htm

National Data Buoy Center — http://www.ndbc.noaa.gov/

NowCoast web portal for coastal conditions — http://www.nowcoast.noaa.gov/

National Weather Service — http://www.weather.gov/

National Hurrican Center — http://www.nhc.noaa.gov/

Pacific Tsunami Warning Center — http://ptwc.weather.gov/

Contact Us — http://www.nauticalcharts.noaa.gov/staff/contact.htm



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